MERCK

Merck is a biopharmaceutical company at the forefront of research to deliver innovative health solutions that advance the prevention and treatment of diseases.

> These resources provide a roadmap for selecting digital measures of physical activity that matter to patients and implementing them in clinical trials. The core set of digital measures and their ontologies greatly facilitate our endpoint discussions.

— Jie Ren

Director, Digital Clinical Measures, Merck

The Opportunity

- Sensor-based digital health technologies (sDHTs) offer numerous physical activity-related measures. Yet, some of these measures may not be meaningful to patients, and there is currently a lack of consistency in reporting measures.
- Establishing a core set of digital measures for physical activity would help capture the most meaningful measures for patients and enhance consistency and comparability across clinical studies.

The Resources

- During the project, DATAcc and the partners defined a core set of digital measures of physical activity and developed ontologies for each measure.
- The team investigated common pain points experienced by clinical researchers seeking to leverage patient-centered digital endpoints for physical activity and outlined a step-by-step process to demystify the selection and implementation of digital measures of physical activity in clinical trials.

The Impact

- ✔ The qualitative research was critical to defining the digital measures of physical activity that would be most valuable to patients, providing a starting point for the field and moving us away from continually reinventing the wheel.
- ✔ The resources offer a clear path to streamline evidence generation and clinical trial implementation for digital measures of physical activity across therapeutic areas, which may facilitate wider adoption for drug development.